

*GRUBEOSYLLIS CELIAE*, A NEW SPECIES OF  
EXOAGONINAE (SYLLIDAE: POLYCHAETA)  
FROM OFF CEUTA, SPAIN

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*Abstract.* — *Grubeosyllis celiae* (Exogoninae; Syllidae; Polychaeta) from sandy bottoms off Ceuta, a Spanish city on the Mediterranean coast of Africa, is described. The new species is characterized by unusual dorsal cirri, the shape of its compound setae, and its unidentate capillary dorsal simple setae.

We studied the polychaetes from samples of sublittoral sand, taken by scuba diving during the summer of 1986 in an expedition carried out by the Musée d'Histoire Naturelle de Paris (Ceuta-86). Provisionally, 88 species have been identified, including a new species of *Exogone*, described by San Martín & Parapar (1990).

In this report, a new species of *Grubeosyllis* Verrill, 1900 is described. The specimens have been mounted in slide preparations using glycerine jelly. Observations and measurements were made by means of a microscope provided with interference contrast optics (Nomarsky). Drawings were made by using a drawing tube. All measurements were taken excluding appendages and setae. The type material is deposited in the Museo de Historia Natural Luis Iglesias de la Universidad de Santiago de Compostela (MHNS-2-Pol 1-6), Spain.

Family Syllidae Grube, 1850  
Subfamily Exogoninae Rioja, 1925  
Genus *Grubeosyllis* Verrill, 1900

*Grubeosyllis celiae*, new species  
Fig. 1

*Material examined.* — Playa Benitez, Ceuta (Spain) (36°54'15"N, 5°19'54"W); sand; 23 m; holotype and 5 paratypes. El Píneo, Ceuta (Spain) (36°52'36"N, 5°19'46"W); sand; 11 m; 2 paratypes.

Holotype and paratypes under the same catalog number: MHNS-2-Pol.

*Etymology.* — The species is named in honor of Dr. Celia Besteiro, Departamento de Biología Animal, Universidade de Santiago de Compostela (Spain), for her help and friendship.

*Description.* — All specimens incomplete; similar in size. Body moderately long, slender. Holotype, a mature female, is nearly 3 mm long, 0.2 mm wide, with 30 setigers. Prostomium pentagonal to ovate (Fig. 1A). Four large, red eyes, one pair slightly in front of other pair. Median antenna fusiform or club-shaped, originating on middle of prostomium, similar in length to prostomium and palps together. Lateral antennae similar, but slightly shorter, originating near anterior margin of prostomium. Palps shorter than prostomium, broad, fused along their length; sometimes showing a faint line of fusion. Tentacular cirri similar both in shape and length to antennae (Fig. 1A); those of dorsal pair longer than those of ventral pair. Dorsal cirri on all setigers, cylindrical to club-shaped; bases slender and usually distal end thicker. Dorsal cirri fragile, longer than parapodial lobes, usually shorter than setae, except anteriorly. Compound setae (Fig. 1B) similar on all parapodia, without distinct antero-posterior gradation in shape or in length; blades slender, strongly bidentate, with distal and proximal teeth well sep-

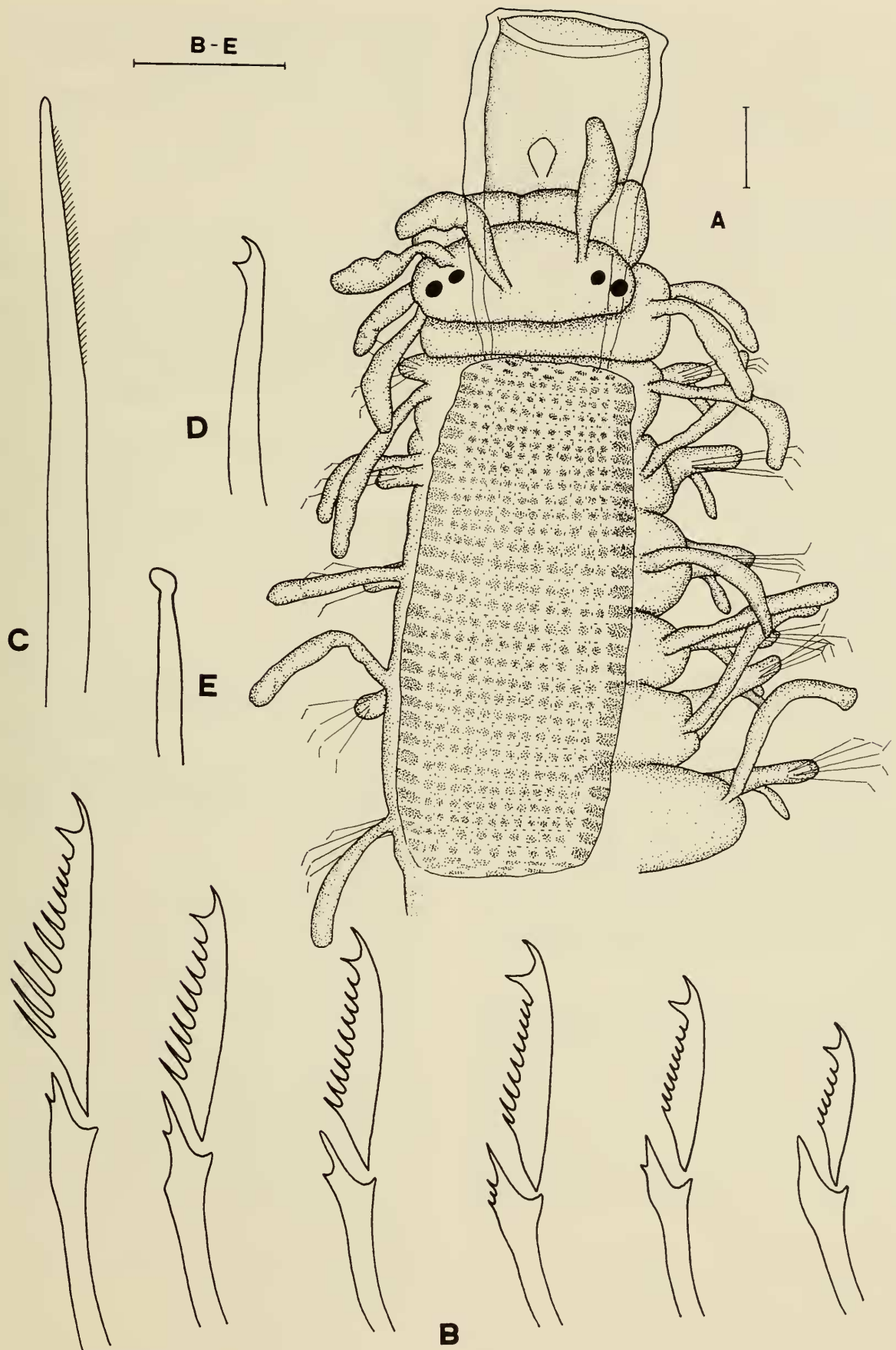


Fig. 1. *Grubeosyllis celiae*: A, Anterior end, dorsal view (paratype, MHNS-2-Pol-6), left parapodia partly concealed by the body; B, Compound setae organized in series from dorsal to ventral; C, Dorsal simple seta; D, Ventral simple seta; E, Aciculum. B-E from midbody parapodia (holotype, MHNS-2-Pol-1). Scale: A, 64  $\mu\text{m}$ . B-E: 10  $\mu\text{m}$ .



arated, forming almost a right angle, distal tooth somewhat curved, proximal tooth slightly thicker than distal one; blades provided with long, thin serrations on cutting margin. Slight dorso-ventral gradation present, ventral blades shorter, with shorter spines on cutting margin. A parapodium of midbody with about 9 setae, with blades 23  $\mu\text{m}$  above, 10  $\mu\text{m}$  below. Solitary dorsal simple seta (Fig. 1C) from first setiger, straight, unidentate, provided with short, dense serrations on ventral side, thin anteriorly increasing in thickness posteriorly. Solitary ventral simple seta from midbody, bidentate with similar teeth to blades of compound setae, s-shaped, smooth (Fig. 1D). Solitary acicula in each parapodium, slender, with rounded tip, increasing in thickness posteriorly (Fig. 1E). Pharynx long and wide, partial or totally everted on all specimens, anterior rim smooth; pharyngeal tooth rhomboidal, placed in front of midline of pharynx. Proventriculus massive, barrel shaped, longer than pharynx, extending through about 6 segments, with about 34 muscle cell rows. Visible pharynx to proventricle length ratio between 0.62 and 0.72. Length to width ratio of proventricle between 2.30 and 2.50.

Holotype and one paratype mature females, with 1–2 oocytes in each segment of midbody.

*Remarks.*—*Grubeosyllis* was described by Verrill (1900), but it was considered a synonym of *Brania* Quatrefages, 1865 by Hartman (1959).

San Martín (1984) described a new genus, *Pseudobrania*, for a group of species of *Brania*; however San Martín (1991) referred this genus to *Grubeosyllis*. The distinction between *Grubeosyllis* and *Brania* as currently defined is here considered valid.

Most of the species of *Grubeosyllis* have fusiform dorsal cirri, with bulbous bases and long, pointed tips, as in *G. clavata* (Claparède, 1863) (see Fauvel 1923:296, San Martín 1984:167); *G. clavata* (Claparède, 1863) (see Fauvel 1923:298, San Martín 1984:164); *G. subterranea* (Hartmann-

Schröder, 1956:89) (see Westheide 1974:87, Campoy 1982:256); *G. concinna* (Westheide, 1974:91); *G. vieitezi* (San Martín, 1984:160); *G. alvaradoi* (San Martín, 1984:152); *G. yraidae* (San Martín, 1984:156); *G. nitidula* Verrill, 1900:628 (see San Martín 1991); *G. euritmica* (Sardá, 1984:10); *G. balani* (Hartmann-Schröder, 1960:102) (see Alós et al. 1983:292); *G. opisthodentata* (Hartmann-Schröder, 1979:101); *G. gracilis* (Hartmann-Schröder, 1960:101); *G. longisetosa* (Hartmann-Schröder, 1979:102), and *G. brevipharyngea* (Banse, 1972:198).

The remaining species of *Grubeosyllis*, have cylindrical dorsal cirri, similar to those in *G. celiae*, but have very different compound setae: *G. mediodentata* (Westheide, 1974:93); *G. swedmarki* (Gidholm, 1962:256) (see Campoy 1982:251), and *G. rugulosa* Verrill, 1900:629 (see San Martín 1991).

*Grubeosyllis rugulosa* Verrill, 1900 appears to be the most closely related species; this species has a very similar body, however it has strongly bidentate dorsal simple setae and in the blades of the compound setae the gap between the teeth is far less prominent.

Although the dorsal cirri and setae of the new species are unusual within the genus, the pharynx, pharyngeal tooth, and proventriculus are typical of *Grubeosyllis*. We therefore place this species in *Grubeosyllis* instead of describe a new one. The genus *Psammosyllis* Westheide, 1990, with the only known species *P. aliciae* (Westheide, 1990:165) has similar dorsal cirri, pharynx and proventriculus. However, *P. aliciae* has very long, completely fused palps, the pharyngeal tooth is not rhomboidal and it is located behind the midline of the pharynx. Apparently, *Psammosyllis* is a very close genus to *Grubeosyllis*.

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